

AMENDMENTS TO THE CLAIMS

Claims 1-108 (Canceled)

109. (Currently Amended) A method for inducing intracellular hyperthermia in a subject comprising the step of administering to the subject an amount of a ~~mitochondrial uncoupling agent~~ 2,4 dinitrophenol sufficient ~~to the subject~~ to induce whole body intracellular hyperthermia in the subject, wherein the induced intracellular hyperthermia is used to treat or diagnose infections that result from *Borrelia burgdorferi*, *Mycobacterium leprae*, *Treponema pallidum*, HIV, hepatitis C, herpes virus or papillomavirus.
110. (Canceled)
111. (Canceled)
112. (Currently amended) The method of claim 109, wherein ~~an animal is administered the mitochondrial uncoupling agent and a separate~~ second medication is administered, wherein the second medication increases the overall metabolic rate of the subject animal, ~~the metabolic rate of a specific target tissue in the animal~~, or an increase in free radical flux.
113. (Previously presented) The method of claim 109, wherein the induced intracellular hyperthermia involve the induction of heat shock proteins.
114. (Previously presented) The method of claim 109 further comprising administering an anti-bacterial agent selected from the consisting of betalactam, macrolide, tetracycline, aminoglycoside, peptide antibiotic, sulfonamide, quinolone, nucleoside, oligosaccharide, polyene, nitrofur, and a combination thereof.
115. (Currently amended) The method of claim 109 further comprising administering an antiviral agent selected from the group consisting of amantadine, rimantadine, arildone, ribavirin, acyclovir, abacavir, vidarabine, ~~(ARA-A)~~ 9-1,3-dihydroxy-2-propoxy methylguanine (~~DHPG~~), ganciclovir, enviroxime, foscarnet, amplitgen, podophyllotoxin,

2,3-dideoxytidine (~~ddQ~~), iododeoxyuridine (~~IDU~~), trifluorothymidine (~~TFT~~), dideoxyMosiine (~~ddi~~), d4T, 3TC, zidovudine, efavirenz, indinavir, saquinavir, ritonavir, nelfinavir, amprenavir, and a combination thereof.

116. (Currently amended) A method for inducing intracellular hyperthermia in a subject comprising the step of administering to the subject an amount of ~~a mitochondrial uncoupling agent 2,4 dinitrophenol~~ sufficient ~~to the subject~~ to induce whole body intracellular hyperthermia in the subject, wherein the induced intracellular hyperthermia is used to treat or diagnose an infestation that results from Candida, Sporothrix schenckii, Histoplasma, paracoccidioides, Aspergillus, Leishmania, malaria, acanthamoeba or cestodes.
117. (Currently amended) The method of claim 116 further comprising administering an antifungal agent selected from the group consisting of Amphotericin B, Griseofulvin, Fluconazole (~~Diflucan~~), Intraconazole, 5 fluoro-cytosine (~~Flutoctosine, 5-FC~~), Ketatoconazole and Miconazole.
118. (Canceled)
119. (Canceled)
120. (Currently amended) The method of claim 116, wherein ~~an animal is administered the mitochondrial uncoupling agent and a separate second medication~~ is administered, wherein the second medication increases the overall metabolic rate of the subject animal, ~~the metabolic rate of a specific target tissue in the animal~~, or causes an increase in free radical flux.
121. (Previously presented) The method of claim 116, wherein the induced intracellular hyperthermia involve the induction of heat shock proteins.